

**AMENDMENTS TO THE CLAIMS**

**1-8. (Cancelled)**

**9. (Currently Amended)** An isolated polynucleotide ~~encoding comprising the sequence~~ of SEQ ID NO: 1, said polynucleotide encodes a secretory or membrane-binding chimeric protein composed of an energy-generating protein and an energy-receiving protein linked to one another wherein energy transfer can arise between the energy-generating protein and the energy-receiving protein, ~~or a complementary chain thereof,~~ wherein the chimeric protein is composed of *Vargula* luciferase ~~or Cypridina luciferase~~ and YFP ~~and wherein the polynucleotide encoding a chimeric protein composed of Vargula luciferase and YFP comprises the sequence of SEQ ID NO: 1.~~

**10. (Original)** A vector comprising the polynucleotide according to claim 9.

**11. (Original)** A transformant transformed with the vector according to claim 10.

**12. (Original)** A method for producing a secretory or membrane-binding chimeric protein ~~including a step of comprising~~ culturing the transformant ~~according to~~ claim 11 in a medium, and ~~a step of~~ collecting the secretory or membrane-binding chimeric protein from the medium.

**13-16. (Cancelled)**

**17. (Previously Presented)** The polynucleotide according to claim 9, ~~wherein further comprising a monitor peptide is introduced~~ between luciferase and YFP or inside the luciferase or inside the YFP ~~so as to~~ retain an energy-generating property or an energy-receiving property, and the energy transfer is inhibited by cleaving the monitor peptide.

**18. (Currently Amended)** An isolated polynucleotide encoding a chimeric protein comprising the sequence of SEQ ID NO: 1.

19. (New) An isolated polynucleotide encoding a secretory or membrane-binding chimeric protein composed of an energy-generating protein and an energy-receiving protein linked to one another wherein energy transfer can arise between the energy-generating protein and the energy-receiving protein, wherein the chimeric protein is composed of *Cypridina* luciferase and YFP and wherein a polynucleotide encoding *Cypridina* luciferase is isolated from *Cypridina noctiluca*.